R5650-2

JAPAN · ECONOMIC · INSTITUTE

JEI REPORT

A Two-Part Report: A and B

NO. 24B
June 22, 1990

IN THIS ISSUE:

Debate On Consumption Tax Continues 1

Tokyo Tries To Rekindle Interest In Energy 3

Mosbacher Outlines Competitiveness Agenda On Capitol Hill 7

Nakayama, Baker Discuss Trade, Global Politics And Security Issues 9

Final SII Report: Race Against Time 10

Notes: Export Controls 12

Debate On Consumption Tax Continues

Now that the FY 1990 budget is in effect (see JEI Report No. 23B, June 15, 1990), the remainder of the current Diet session is focusing on alternative proposals to amend the 3 percent consumption tax. The Liberal Democratic Party, which has a majority in the lower house, wants to exempt food, education and other basic costs from the consumption tax, while the opposition parties have proposed replacing the consumption tax with specific commodity taxes. Neither plan is expected to clear the house in which proponents of the other plan have a majority. The LDP's faint hopes of edging the opposition parties out of their control of the upper house waned when the Japan Socialist Party won a June 10 by-election in Fukuoka prefecture. Had the LDP candidate won, upper house lawmakers representing some small parties plus an independent and Democratic Socialist Party legislators had been expected to join the LDP team (see JEI Report No. 20B, May 18, 1990). However, the solid victory for the JSP's Shigeko Mieno, who had campaigned on a platform urging abolition of the consumption tax, has reinforced the JSP's resolve to dismantle the tax.

increasing their prices 3 percent even though they do not remit the tax to the government. As a result, MOF is reportedly planning to propose a new, lower exemption level. What MOF decides to do, however, most likely will not take effect until the LDP and the opposition parties devise a more coherent approach to revising the consumption tax.

Hideo Takahashi

Tokyo Tries To Rekindle Interest In Energy

A recent flurry of government reports may signal the start of a campaign to rekindle the Japanese public's awareness of energy conservation. The reports call for renewed efforts to promote the development of nonfossil-fuel energy sources as well as conservation, particularly with regard to the residential sector where the growth of energy consumption is outrunning earlier predictions. The government campaign, however, faces many potential pitfalls.

Although Japan's attention to energy conservation rose to manic proportions in reaction to the twin oil crises of the 1970s, interest has waned under the miasmic influence of several years of strong economic growth and low global oil prices. As long as total economic output was growing faster than energy consumption -- showing that overall energy efficiency was improving -- energy policymakers were not overly worried about flagging concern for conservation. Ministry of International Trade and Industry officials estimate that between FY 1973 and FY 1988 the amount of energy consumed per unit of price-adjusted gross national product fell 36 percent. Recent data, however, reveal a reversal. Japan's energy consumption rose 5.7 percent in fiscal 1988 compared with overall real GNP growth of 5.3 percent. Government analysts predict that the economy's energy efficiency declined again in FY 1989.

No fewer than three MITI advisory bodies have submitted new energy demand forecasts and conservation plans within the past month. The nuclear subcommittee and the supply and demand subcommittee of the Advisory Committee for Energy, the Electricity Utility Industry Council and the Natural Resources and Energy Agency all agree that domestic energy consumption is outrunning previous forecasts. Compared with its previous long-term outlook (Table 1), the Advisory Committee for Energy now predicts that total energy requirements in the year 2000 will surpass what was previously projected for 2005 (see Table 2). The group estimates that residential use will be the driving force behind the overall growth of energy demand over the next 20 years (see Table 3). This is true particularly for electricity use. The Electricity Utility Industry Council report indicates that household electricity use will outstrip industrial consumption by the year 2010, reflecting an increasingly prosperous lifestyle (see Table 4).

If the projected growth of energy demand sounds high, it should be pointed out that every report includes significant reductions in consumption through new conservation measures. The Advisory Committee for Energy, for example, assumes that the energy-to-GNP ratio will improve by more than 30 percent over the forecasted interval. The Electricity Utility Industry Council expects an efficiency gain of better than 10 percent in the use of electricity over the life of its outlook. Technological innovations expected to increase energy efficiency include "intelligent" buildings that actively monitor and

Table 1: Long-Term Energy Outlook, October 1987

(in millions of units and percent share)

	FY 1986		FY 1995		FY 2000		FY 2005	
	Units	Share	Units	Share	Units	Share	Units	Share
Coal (mt)	103.9	18.3%	121.0	18.3%	136.0	18.7%	150.0	19.0%
Nuclear (kw)	25.8	9.5	41.5	13.4	53.5	15.9	65.0	18.0
Natural Gas (kl)	42.8	9.9	55.0	11.1	58.0	10.8	60.0	10.0
LNG (kl)	28.8	6.7	36.0	7.3	38.0	7.1	---	---
Hydroelectric (kw)	35.8	4.2	42.5	4.5	45.5	4.4	48.5	4.0
Geothermal* (kl)	0.4	0.1	2.0	0.4	4.4	0.8	6.0	1.0
Alternatives* (kl)	5.5	1.3	12.5	2.5	24.5	4.5	52.0	9.0
Oil (kl)	246.0	56.8	245.0	49.7	242.0	45.0	240.0	42.0
Domestic (kl)	0.7	0.2	1.3	0.3	1.9	0.4	---	---
LPG (mt)	16.2	---	18.0	---	19.0	---	---	---
Total* (kl)	433.0	100.0	490.0	100.00	540.0	100.0	580.0	100.0

*Crude oil equivalent.

Table 2: Long-Term Energy Outlook, June 1990

(in millions of units and percent share)

	FY 1988		FY 2000		FY 2010	
	Units	Share	Units	Share	Units	Share
Coal (mt)	114.6	18.1%	142.0	17.4%	142.0	15.5%
Nuclear (kw)	179.0	9.0	330.0	13.2	474.0	16.7
Natural Gas (kl)	46.1	9.6	65.0	10.9	80.0	12.0
Hydroelectric (kw)	86.0	4.6	91.0	3.7	105.0	3.7
Geothermal* (kl)	0.4	0.1	1.8	0.3	6.0	0.9
Alternatives* (kl)	6.2	1.3	17.4	2.9	34.6	5.2
Oil (kl)	276.0	57.3	308.0	51.6	306.0	46.0
LPG (mt)	17.4	---	22.0	---	23.0	---
Total* (kl)	482.0	100.0	597.0	100.0	666.0	100.0

*Crude oil equivalent.

Source: Ministry of International Trade and Industry

control energy use as well as new building materials and designs, better wiring, more efficient appliances and improved generation and distribution systems.

Also highlighted is more aggressive development of alternative energy sources, with a particular emphasis on nuclear power. The reports seek to capitalize on growing public concern over environmental issues, such as global warming, to bolster their arguments for nuclear power, cogeneration systems,

Table 3: Projected Energy Consumption, June 1990

(millions of kiloliters of crude oil equivalent; share of total in parentheses)

Sector	FY 1988	FY 2000	FY 2010
Industry	173 (53.2%)	194 (49.2%)	206 (46.5%)
Manufacturing	147 (45.1%)	164 (41.5%)	173 (39.1%)
Households	80 (24.6%)	110 (27.8%)	134 (30.2%)
Transportation	72 (22.3%)	91 (23.0%)	103 (23.3%)
Total	325 (100.0%)	395 (100.0%)	444 (100.0%)

Source: Ministry of International Trade and Industry

Table 4: Projected Electricity Demand and Supply, June 1990

(millions of kilowatt-hours; share of total in parentheses)

	FY 1988	FY 2000	FY 2010
Demand			
Industry	391.1 (58.2%)	475.0 (51.3%)	505.0 (46.7%)
Households	281.2 (41.8%)	452.0 (48.7%)	575.0 (53.3%)
Supply			
Electric Utilities	597.4 (88.9%)	830.0 (89.5%)	973.0 (90.1%)
Households	74.9 (11.1%)	97.0 (10.5%)	107.0 (9.9%)
Total	672.3 (100.0%)	927.0 (100.0%)	1,080.0 (100.0%)

Source: Ministry of International Trade and Industry

home generation systems and renewable energy sources, such as methanol (Table 5).

The advisory bodies are careful to point out that their projections could easily be upset by a number of developments beyond their control, the

Table 5: Projected Electricity-Generating Capacity and Deliveries, June 1990

(in hundreds of thousands of kilowatts and percent share)

	FY 1988		FY 2000		FY 2010	
	Units	Share	Units	Share	Units	Share
Capacity						
Nuclear	287.0	17.4%	500.0	22.0%	720.0	27.0%
Coal	111.2	6.7	296.0	13.0	400.0	15.0
Natural Gas	330.6	20.1	503.0	22.0	530.0	20.0
Hydroelectric	361.3	21.9	445.0	19.0	517.0	19.0
Geothermal	1.8	0.1	10.0	0.4	35.0	1.0
Methanol	---	---	---	---	10.0	0.4
Alternatives	---	---	11.0	0.5	57.0	2.0
Oil	556.3	33.8	512.0	22.0	402.0	15.0
Total	1,648.2	100.0	2,277.0	100.0	2,670.0	100.0
Deliveries						
Nuclear	177.6	26.6	329.0	35.0	473.0	43.0
Coal	63.6	9.5	156.0	16.0	163.0	15.0
Natural Gas	141.4	21.2	188.0	20.0	201.0	18.0
Hydroelectric	88.6	13.3	101.0	11.0	118.0	11.0
Geothermal	1.1	0.2	6.0	1.0	21.0	2.0
Methanol	---	---	---	---	4.0	0.3
Alternatives	---	---	3.0	0.3	25.0	2.0
Oil	194.4	29.2	163.0	17.0	105.0	10.0
Total	666.8	100.00	946.0	100.0	1,109.0	100.0

Note: Figures may not add up due to rounding.

Source: Ministry of International Trade and Industry

most likely being a third oil crisis. The Japanese public's increasing resistance to nuclear power is a major obstacle to achieving sharp increases in nuclear generating capacity, which would require another 40 nuclear plants to be added to the existing 38. (A handful are currently under construction.) The Advisory Committee for Energy's nuclear subcommittee reports that the average construction time from planning to power generation has risen from just under eight years in the 1970s to nearly 27 years today. Communities also expect long-term gains from having a nuclear power plant in their backyard, not just short-term compensation. The subcommittee calls for special attention to safety issues and to the problem of radioactive waste disposal to allay the public's concerns. Nevertheless, it is clear that the government has set ambitious goals in the energy area, a field where Japan could exert global leadership.

Jon Choy